

# Notice of Allowability

Application No.

10/649,274

Applicant(s)

WHETSEL, LEE DOYLE

Examiner

Cynthia Britt

Art Unit

2133

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/27/03.
2. ☒ The allowed claim(s) is/are 25-45.
3. ☒ The drawings filed on 27 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date A&B 8/27/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

### **Information Disclosure Statement**

An initialed and dated copy of Applicant's IDS form 1449, both A and B, filed August 27, 2003, is attached to the instant Office action.

### ***Drawings***

The drawings were received on August 27, 2003. These drawings are acceptable.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence Bassuk on April 15, 2005.

The application has been amended as follows:

Change Title to: "IC With Serial Scan Path, Protocol Memory, and Event Circuit"

### **Reasons for Allowance**

Claims 1-45 are allowed.

The following is an examiner's statement of reasons for allowance:

The present invention pertains to an integrated circuit with a serial scan path, a protocol memory, and an event control circuit. The present invention (claim 27 as the broader independent claim) recites the following features: An integrated circuit comprising: A. functional circuits including an operating bus of plural leads;

B. a serial data input lead and a serial data output lead;

C. at least one serial scan path of scan registers coupled between the serial data input lead and the serial data output lead;

D. a protocol selection memory coupled to the at least one serial scan path, the protocol selection memory having at least one storage location to store a protocol selection signal;

E. an expected data memory coupled to the at least one serial scan path, the expected data memory having plural expected data storage locations for storing signals representing an expected data pattern;

F. a comparator having first inputs coupled to the operating bus, second inputs coupled to the expected data memory, and a compare output;

G. an event control circuit including a protocol input connected to the protocol selection memory, an event input lead coupled to the compare output of the comparator, and an event output lead.

The prior arts of record (US 4,577,318 to Whitacre, et al.), discloses comparing A data on the lines of data set A with B data on the lines of data set B. The lines of A data and the lines of B data are fed to selector multiplexers. The outputs of these multiplexers are fed to an EOR circuit for comparison. A mask register connects to the

selector multiplexers in order to blank out selected input lines to the multiplexers. Mask register has an input bus, which carries the bus control signals from bus control unit, which in turn connects to the D or data bus. The present claims distinguish over the cited art by requiring a protocol selection memory to be coupled to a serial scan path or a serial data input lead and requiring an event circuit to be coupled to the protocol selection memory.

As such, the specified combination of the circuitry within the independent claims are novel such that modification of the prior art of record can only be motivated by hindsight reasoning, or by changing the intended use and function of the prior arts themselves. Therefore, it is not clear that one of ordinary skill in the art at the time of the invention would have made the necessary modifications to the prior arts of record to encompass the limitations set forth in the present application. Moreover, none of the prior arts of record, taken either alone or in combination, anticipate nor render obvious the claimed inventions. Hence, claims 25-45 are allowable over the prior arts of record.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Britt whose telephone number is 571-272-3815. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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